Public Health The Epidemiologic Response to Bioterrorism

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Detect a Problem

- Disease reporting system
- Enhanced surveillance
 - Syndromic
 - School
 - Other
- Astute clinician(s)

Confirm the Diagnosis

- Find (some of the) sick people
- Find out characteristics of illness, what diagnostic tests have been done, what test results have been
 - Interview patient, provider (MD, ICP, lab)
 - Review chart
- Collect specimens to send to DCLS

Protect Others

- Ensure patient is managed in a way that does not put others at risk
- Identify and locate contacts
- Put measures in place to protect contacts
 - Ranging from health education to quarantine
- Public information about the situation
 - What residents can do to protect health

Identify Exposure

- Find as many cases as possible
- Interview patients about exposure history
 - May need to use family members as proxy
- Put data from multiple patients together to form hypotheses about possible exposure(s)
 - ideally one suspect source of exposure is identified

Identify Exposure, continued:

- Find others who are not ill but had the same opportunity for that exposure.
 Interview ill and well to gather data to test hypotheses
 - Need standard questionnaire,
 - Database, statistical methods
 - Choose appropriate study design

If Identify Exposure:

- Find a way to locate everyone who had the exposure
- Conduct surveillance for illness
- Provide health education for how to protect their health and that of their contacts

If Intervention Available for that Disease:

- Provide antibiotic or vaccine to exposed persons to prevent disease
- Monitor for development of symptoms of disease and/or adverse reactions

Throughout...

- Communicate with internal and external partners
- Communicate with the affected population and the public
- Assess risk, help those at risk, assist others who are concerned